# Understanding Your Annual Performance Report (APR)

District Name: ANY DISTRICT County/District Code: 000-999

Points Earned: (See Scoring Guide)
H=High AH=High Average Y=Yearly Increase A=Average R=Rolling Average C=Combined Standard
MA=Math CA=Communication Arts SC=Science SS=Social Studies #=Level Not Determined +Floor Exceeded bpts=Bonus Points \*Additional Data Required

					innica (1 100) Exceeded bpts	1	
Standard	Indicator	Topic	Scoring Guide Points Possible	Scoring Guide Points Required	Scoring Guide Points Earned	Performance Standard Met	Overall Points
9.1	*1	MAP Index	16	8 8	TOTAL=13	Met	9
9.1	*1	Grade 3-5	16	8	MA-Y=3 CA-A=3 SC-A=3 SS-R=4 bpts=0	Met	y
	*2	MAP Index Grade 6-8	16	8	TOTAL=8 MA-A=3 CA-H=0 SC-Y=1 SS-H=4 bpts=0	Met	9
	*3	MAP Index Grade 9-11	16	8	TOTAL=14 MA-Y=3 CA-R=4 SC-A=3 SS-H=4 bpts=0	Met	9
9.2		Reading Index Grade 3	4	3	H=4 A=3 AH=4 R=2 Y=1	Met	9
		Reading Index Grade 7	4	3	H=0 A=0 AH=4 R=0 Y=0	Met	9
9.3		ACT	15	9	H=0 A=9 Y=6 R=10	Met	9
9.4	*1	Advanced Courses	15	9	H=12 R=10 AH=0 C=Y Y=6	Met	7
	*2	Voc. Courses	15	9	H=0 Y=3R=0 AH=0 C=Y	Met	7
	*3	College Placement	15	9	H=0 R=5 AH=0 C=N Y=6	Not Met	0
	*4	Voc. Placement	15	9	H=0 R=5 AH=12 C=N Y=6	Met	7
10.1	*1	Dropout	15	9	H=12 A=9 Y=3 R=5	Met	9
		GED - Bonus points on Dropout Rubric	+3 Points o	on 10.1*1 or on 10.1*1	0		
	*2	Attendance	15	9	H=0 A=9 Y=0 R=0	Met	9
					District Overal	l Points	93

The above indicates the district's status in meeting the Performance Indicators as of October 1, 2002. These may be used in planning for school improvement, but they will be used to make MSIP accreditation decisions only for those districts being reviewed in 2002-2003 and for Re-review purposes. (See attachments for actual data.)

A guide to the sources and calculations used in developing your APR

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#### MSIP PERFORMANCE SCORING MATRIX FOR 2003-2004

Standard	Indicator	Topic*	Scoring Guide Points Possible**	Scoring Guide Points Required	Overall Accreditation Points (if Met)
9.1	*1	Index Approach MAP Grades 3-5	16 12	8 6	9
		WAP Grades 3-3	8	4	9
		Percentage Improvement Approach	32	16	
		MAP Grades 3-5	24	12	
		With Glades 5 5	16	8	
	*2	Index Approach	16	8	
	_	MAP Grades 6-8	12	6	9
			8	4	
		Percentage Improvement Approach	32	16	
		MAP Grades 6-8	24	12	
			16	8	
	*3	Index Approach	16	8	
		MAP Grades 9-11	12	6	9
			8	4	
		Percentage Improvement Approach	32	16	
		MAP Grades 9-11	24	12	
0.0			16	8	
9.2	*1	Index Approach Reading Grade 3	4	3	9
		Percentage Improvement Approach Reading Grade 3	4	3	
	*2	Index Approach Reading Grade 7	4	3	9
		Percentage Improvement Approach Reading Grade 7	4	3	
9.3		ACT	15	9	9
9.4	*1	Advanced Courses	15	9	7
	*2	Vocational Courses	15	9	7
	*3	College Placement	15	9	7
	*4	Voc. Placement	15	9	7
10.1	*1	Dropout	15	9	9
	*2	Attendance	15	9	9

<sup>\*</sup> The index approach is used for MAP standards to calculate points within a grade span. If a district fails to meet the standard for a grade span using the index approach, the percentage improvement approach is then used. If a district does not meet the standard for a grade span using either approach, scoring results are reported using the index approach.

<sup>\*\*</sup> The points possible for the grade spans included in Standard 9.1 are determined by the number of subject area tests administered (2, 3, or 4) and by the scoring approach used (index or percentage improvement).

## **Standard 9.1** Indicators 1, 2, and 3 (MAP)

**Source of data used in calculation**: Data are obtained from CTB McGraw-Hill, which is the contracted testing publisher for the Missouri Assessment Program. This CTB data file is used to create ClearAccess CDs for district use.

#### **NOTES:**

- For 2003 APRs, data from the past five years are used in the MSIP scoring guidelines for math, communication arts, and science. Data from the past four years are used for social studies.
- If the MAP testing schedule is reconfigured, the MAP scoring guidelines may be redesigned to maintain the continuity of MAP measurement for MSIP purposes.
- *All MAP performance data are reported to the nearest tenth.*
- *MAP data for K-8 districts include only two grade spans (3-5 and 6-8).*

Two approaches are used to analyze improvement in MAP performance: the index approach and the percentage improvement approach. The index approach calculates the movement of students throughout all five MAP levels (Step I, Progressing, Nearing Proficient, Proficient, and Advanced). The percentage improvement approach calculates movement of students out of the bottom two levels and into the top two levels of the MAP. Data for each approach are analyzed and displayed by grade span (3-5, 6-8, and 9-11) using the five scoring guide methods outlined for each approach (high, average high, yearly increase, multiple-year over the base year, and rolling average). A grade span may be met using only one approach; however, each content/subject area may earn points using a different scoring guide method (high, average high, yearly increase, multiple-year average over the base year, and rolling average.). The same scoring guide method must be used for both the top two levels and the bottom levels whenever the percentage improvement approach is used.

During the 2002-2003 school year, social studies and science assessments were not state-funded. Districts were allowed to choose whether or not to use local funds to administer one or both of these assessments. If a district that participated in one or both of these voluntary subjects in 2003 does not meet a standard using voluntary data, the standard is evaluated using only math and communication arts results. Scoring procedures are not applied to science or social studies without the 2003 data. Districts that did not participate in all four assessments are considered "Met" on the MAP standards for a grade span if they receive half of the possible points. In other words, districts participating in assessments of three subject areas can meet the MAP standard for a grade span by earning 6 out of 12 points using the index approach or 12 out of 24 points using the percentage improvement approach. Districts participating in assessments of only two subject areas (or districts that do not meet the standard using voluntary subjects) can meet the MAP standard for a grade span using math and communication arts results by earning 4 out of 8 points using the index approach or 8 out of 16 points using the percentage improvement approach.

## **MAP Scoring Guidelines Using the Index Approach**

For each subject in each grade span, MSIP uses the index approach to compare improvement on the MAP. The index approach is based on a composite of the performance of all students across all five MAP achievement levels. The assessment results in each subject tested for each year are converted to index points, and these index points are used to measure improvement from year to year. Index points are calculated by first multiplying the percent of students scoring at each achievement level for each subject and each year by the following values: Advanced by 3, Proficient by 2.5, Nearing Proficient by 2, Progressing by 1.5, and Step 1 by 1. These products are then summed to produce the index. (See Appendix Subsection A1 for further explanation and an example of how the index is calculated.) The index scoring guide methods are then applied to each subject in each grade span. The method awarding the maximum total points is used for each subject area, and

the grade span is considered "Met" if at least half of the possible points are earned. The following tables explain each of the index methods that are applied to assessment results:

High (H)		<b>Points</b>
Math	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 220 in grades 3-5, 181 in grades 6-8, and 168 in grades 9-11.	4
Communication Arts	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 211 in grades 3-5, 205 in grades 6-8, and 195 in grades 9-11.	4
Science	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 225 in grades 3-5, 183 in grades 6-8, and 179 in grades 9-11.	4
Social Studies	Using 4 years of data, 4 points if in 3 of 4 years the index is equal to or greater than 211 in grades 3-5, 217 in grades 6-8, and 185 in grades 9-11.	4

Average High (AH)		Points
Math	Using 5 years of data, 4 points if the average index for all years is equal to or greater than 220 in grades 3-5, 181 in grades 6-8, and 168 in grades 9-11.	4
Communication Arts	Using 5 years of data, 4 points if the average index for all years is equal to or greater than 211 in grades 3-5, 205 in grades 6-8, and 195 in grades 9-11.	4
Science	Using 5 years of data, 4 points if the average index for all years is equal to or greater than 225 in grades 3-5, 183 in grades 6-8, and 179 in grades 9-11.	4
Social Studies	Using 4 years of data, 4 points if the average index for all years is equal to or greater than 211 in grades 3-5, 217 in grades 6-8, and 185 in grades 9-11.	4

Yearly Increase (Y)			
Math	Using 5 years of data, 1 point for each yearly increase of 2 or more index poir	nts. 4	
Communication Arts			
Science			
Social Studies	Using 4 years of data, 1 point for each yearly increase of 2 or more index point	nts. 3	

Multiple-Year Average Over the Base Year (A)				
Math	Using 5 years of data, 3 points if the four-year average (years 2, 3, 4, and 5)	3		
Communication Arts	increases 6 index points or more over the base year and no more than one sco	re in		
Science	the four averaged years falls below the base year.			
Social Studies	Using 4 years of data, 3 points if the three-year average (years 2, 3, and 4)	3		
	increases 4 index points or more over the base year and no more than one sco	re in		
	the three averaged years falls below the base year.			

Rolling Average (R) – see next page for explanation/calculation					
Math	Using 5 years of data, 1 point for each increase of 2 or more index points in the		3		
Communication Arts	rolling average.				
Science					
Social Studies	Using 4 years of data, 2 points for each increase of 2 or more index points in the rolling average.	;	4		

**Level Not Determined (LND):** This is the percent of students for which the district is accountable that do not receive a valid MAP score in a subject area. Students who take MAP-A are included in the LND. No points are awarded in a subject area/grade span if the average LND in that subject area over the years analyzed exceeds 10%. If the LND in one or more years exceeds 14%, the average LND must be 10% or less **and** the LND in the final year of analysis must be 6% or less in order to earn scoring guide points. If a subject area is not scored due to the LND percentage, the # symbol appears next to the subject area on the APR summary sheet. Scores for LEP students who have been in the United States three years or less are disaggregated from the LND if the district selects "LEP first through third year in the U.S.A." on the student information sheets. (See Appendix Subsection A2 for an explanation and example of the LND calculation.)

**Rolling Average:** The rolling average is years 1 and 2 averaged, years 2 and 3 averaged, years 3 and 4 averaged, and years 4 and 5 averaged; these averages are then used for comparison.

#### Example:

4 <sup>th</sup> Grade Math	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Index Score	195.6	192.1	196.8	209.6	213.9

For the above scores, the rolling average would be calculated as following:

➤ STEP 1 – Add the score for each year to the score for the following year.

Years 1999 and 2000: 195.6 + 192.1 = 387.7 Years 2000 and 2001: 192.1 + 196.8 = 388.9 Years 2001 and 2002: 196.8 + 209.6 = 406.4 Years 2002 and 2003: 209.6 + 213.9 = 423.5

> STEP 2 – Divide each of the preceding sums by 2 to determine the bi-annual average.

Years 1999 and 2000:  $387.7 \div 2 = 193.85$ Years 2000 and 2001:  $388.9 \div 2 = 194.45$ Years 2001 and 2002:  $406.4 \div 2 = 203.2$ Years 2002 and 2003:  $423.5 \div 2 = 211.75$ 

> <u>STEP 3</u> – Compare the bi-annual averages to determine the number of scoring points earned using the rolling average method.

4 <sup>th</sup> Grade Math	99-00 Average	00-01 Average	01-02 Average	02-03 Average
Bi-annual Average	193.85	194.45	203.2	211.75

For math, a district earns 1 point for each increase of 2 index points or more on the rolling average. In this example, the index score increases by .6 from the first to the second comparison, by 8.75 from the second to the third comparison, and by 8.55 from the third to the fourth comparison A district with these scores would earn 2 points using the rolling average method.

**Index Floor:** The + symbol on the APR summary chart indicates that the index score in the final year of analysis is below the established floor. Half-point values are earned if the district improves the required points using any of the five scoring guide methods **and** shows progress equal to or greater than the state average increase from year one through the final year used for analysis (see Appendix Subsection A3 for the calculation used for comparison of state and district average improvement). Full scoring guide points are not awarded in a subject if the index score on the last year tested falls below the following floor levels:

<b>Mathematics:</b>	<b>Communication Arts:</b>	Science:	<b>Social Studies:</b>
Grade 4 190	Grade 3 179	Grade 3 191	Grade 4 177
Grade 8 148	Grade 7 171	Grade 7 152	Grade 8 180
Grade 10 140	Grade 11 163	Grade 10 156	Grade 11 155

#### **MAP Bonus Points:**

Districts that have 20 or more students in an ethnic/racial minority in a grade tested may earn MAP bonus points if the improvement of the minority group(s) is greater than or equal to the improvement of the majority group in more than half of the years of comparison. Bonus points are awarded based only on the approach (index or percentage improvement) for which the district receives overall scoring guide points. See Appendix Subsection A4 for an explanation of the bonus point calculation using the index approach.

#### **MAP Scoring Guidelines Using the Percentage Improvement Approach**

If a district fails to meet a grade span using any of the five methods included in the index approach, the following methods of the percentage improvement approach are applied to each subject in each grade span. The percentage improvement approach is used to analyze the percent of students in the bottom two MAP levels (Step 1 and Progressing) and the top two MAP levels (Proficient and Advanced). The method awarding the maximum total points for the bottom two and the top two levels for each grade span is used, and the grade span is considered "Met" if at least half of the possible points are earned. The following tables explain each of the percentage improvement methods that are applied to assessment results:

High (H)	Poi	nts
Upper two levels for e	ach subject	
Math	Using 5 years of data, 4 points if for 4 of 5 years the percent of students in the top	
Communication Arts	two levels is equal to or greater than 50%.	4
Science		
	Using 4 years of data, 4 points if for 3 of 4 years the percent of students in the top	4
Social Studies	two levels is equal to or greater than 50%.	
Bottom two levels for e	each subject	
Math	Using 5 years of data, 4 points if for 4 of 5 years the percent of students in the	
Communication Arts	bottom two levels is equal to or less than 5%.	4
Science		
	Using 4 years of data, 4 points if for 3 of 4 years the percent of students in the	4
Social Studies	bottom two levels is equal to or less than 5%.	

Average High (AH)		<b>Points</b>
Upper two levels for e	ach subject	
Math	Using 5 years of data, 4 points if the average percent of students in the top two	
Communication Arts	levels for all years is equal to or greater than 50%.	4
Science		
	Using 4 years of data, 4 points if the average percent of students in the top two	
Social Studies	levels for all years is equal to or greater than 50%.	4
Bottom two levels for a	<u>each subject</u>	
Math	Using 5 years of data, 4 points if the percent of students in the bottom two leve	ls
Communication Arts	for all years is equal to or less than 5%.	4
Science		
	Using 4 years of data, 4 points if the percent of students in the bottom two leve	ls 4
Social Studies	for all years is equal to or less than 5%.	

Yearly Increase (Y)	Poi	nts
Upper two levels for e	ach subject	
Math Communication Arts Science	Using 5 years of data, 1 point for each 3% or more yearly increase in the percent of students in the top two levels.	4
Social Studies	Using 4 years of data, 1 point for each 3% or more yearly increase in the percent of students in the top two levels.	3
Bottom two levels for e	<u>each subject</u>	
Math Communication Arts Science	Using 5 years of data, 1 point for each 3% yearly decrease in the percent of students in the bottom two levels.	4
Social Studies	Using 4 years of data, 1 point for each 3% yearly decrease in the percent of students in the bottom two levels.	3

Multiple-Year Avera	ge Over the Base Year (A) Poir	ıts	
Upper two levels for ea	Upper two levels for each subject		
Math	Using 5 years of data, 3 points for an increase of 7% or more in the four-year	3	
Communication Arts	average (years 2, 3, 4, and 5) of the percent of students in the top two levels over		
Science	the base year, and no more than 1 score in the four averaged years falls below the		
	base year.		
Social Studies	Using 4 years of data, 3 points for an increase of 5% or more in the three-year	3	
	average (years 2, 3, and 4) of the percent of students in the top two levels over the		
	base year, and no more than 1 score in the three averaged years falls below the		
	base year.		
Bottom two levels for e	<u>each subject</u>		
Math	Using 5 years of data, 3 points for a decrease of 7% or more in the four-year	3	
Communication Arts	average (years 2, 3, 4, and 5) of the percent of students in the bottom two under the		
Science	base year, and no more than 1 score in the four averaged years falls above the base		
	year.		
Social Studies	Using 4 years of data, 3 points for a decrease of 5% or more in the three-year	3	
	average (years 2, 3, and 4) of the percent of students in the bottom two under the		
	base year, and no more than 1 score in the three averaged years falls above the		
	base year.		

Rolling Average (R)	- see next page for explanation/calculation Po	ints
Upper two levels for e	ach subject	
Math Communication Arts Science	Using 5 years of data, 1 point for each 3% or more increase in the top two levels in the rolling average.	n 3
Social Studies	Using 4 years of data, 2 points for each 3% or more increase in the top two levels in the rolling average.	4
Bottom two levels for a	<u>each subject</u>	
Math Communication Arts Science	Using 5 years of data, 1 point for each 3% or more decrease in the bottom two levels in the rolling average.	3
Social Studies	Using 4 years of data, 2 points for each 3% or more decrease in the bottom two levels in the rolling average.	4

**Level Not Determined (LND):** This is the percent of students for which the district is accountable that do not receive a valid MAP score in a subject area. Students who take MAP-A are included in the LND. No points are awarded in a subject area/grade span if the average LND in that subject area over the years analyzed exceeds 10%. If the LND in one or more years exceeds 14%, the average LND must be 10% or less **and** the LND in the final year of analysis must be 6% or less in order to earn scoring guide points. If a subject area is not scored due to the LND percentage, the # symbol appears next to the subject area on the APR summary sheet. Scores for LEP students who have been in the United States three years or less are disaggregated from the LND if the district selects "LEP first through third year in the U.S.A." on the student information sheets. (See Appendix Subsection A2 for an explanation and example of the LND calculation.)

**Rolling Average:** The rolling average is years 1 and 2 averaged, years 2 and 3 averaged, years 3 and 4 averaged, and years 4 and 5 averaged; these averages are then used for the comparison.

#### Example:

Math	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Advanced and	25.6%	23.9%	27.4%	28.2%	33.1%
Proficient					
Step 1 and	48.3%	51.9%	50.1%	44.9%	43.8%
Progressing					

For the above scores, the rolling average would be calculated as following:

➤ <u>STEP 1</u> – Add the percentage of students in Advanced and Proficient for each year to the percentage of students in Advanced and Proficient for the following year.

Years 1999 and 2000: 25.6 + 23.9 = 49.5 Years 2000 and 2001: 23.9 + 27.4 = 51.3 Years 2001 and 2002: 27.4 + 28.2 = 55.6 Years 2002 and 2003: 28.2 + 33.1 = 61.3

> STEP 2 – Divide each of the preceding sums by 2 to determine the bi-annual average.

Years 1999 and 2000:  $49.5 \div 2 = 24.75$ Years 2000 and 2001:  $51.3 \div 2 = 25.65$ Years 2001 and 2002:  $55.6 \div 2 = 27.8$ Years 2002 and 2003:  $61.3 \div 2 = 30.65$ 

➤ <u>STEP 3</u> – Add the percentage of students in Step 1 and Progressing for each year to the percentage of students in Step 1 and Progressing for the following year.

Years 1999 and 2000: 48.3 + 51.9 = 100.2 Years 2000 and 2001: 51.9 + 50.1 = 102 Years 2001 and 2002: 50.1 + 44.9 = 95 Years 2002 and 2003: 44.9 + 43.8 = 88.7

➤ <u>STEP 4</u> – Divide each of the preceding sums by 2 to determine the bi-annual average.

Years 1999 and 2000:  $100.2 \div 2 = 50.1$ Years 2000 and 2001:  $102 \div 2 = 51$ Years 2001 and 2002:  $95 \div 2 = 47.5$ Years 2002 and 2003:  $88.7 \div 2 = 44.35$  > <u>STEP 5</u> -- Compare the bi-annual averages to determine the number of scoring points earned using the rolling average method.

Math	99-00 Average	00-01 Average	01-02 Average	02-03 Average
Advanced and Proficient	24.75	25.65	27.8	30.65
Step 1 and Progressing	50.1	51	47.5	44.35

For math, a district earns 1 point for each 3% or more increase in Advanced and Proficient and each 3% or more decrease in Step 1 and Progressing using the rolling average. In this example, the percentage in Advanced and Proficient increases by .9 from the first to the second comparison, by 2.15 from the second to the third comparison, and by 2.85 from the third to the fourth comparison. The percentage in Step 1 and Progressing does not decrease from the first to the second comparison, then decreases by 3.5 from the second to the third comparison, and decreases by 3.15 from the third to the fourth comparison. A district with these scores would earn 2 points using the rolling average method.

**Percentage Improvement Floor:** The + symbol on the APR summary chart indicates that the percent of students scoring in Step 1 and Progressing in the final year of analysis is above the established floor for the percentage improvement approach. Full scoring guide points are not awarded in a subject if the percentage of students in Step 1 and Progressing on the last year tested is above (in other words, if the percentage is higher than) the floor levels listed below. Half-point values are earned if the district improves the required points using any of the five scoring guide methods <u>and</u> shows progress equal to or greater than the state average increase from year one through the final year used for analysis.

<b>Mathematics:</b>	<b>Communication Arts:</b>	Science:	<b>Social Studies:</b>
Grade 4 35%	Grade 3 46%	Grade 3 29%	Grade 4 49%
Grade 8 76%	Grade 7 60%	Grade 7 78%	Grade 8 45%
Grade 10 81%	Grade 11 83%	Grade 10 72%	Grade 11 61%

#### **MAP Bonus Points:**

Districts that have 20 or more students in an ethnic/racial minority in any grade tested may earn MAP bonus points if the improvement of the minority group is greater than or equal to the improvement of the majority group in more than half of the years of comparison. Comparisons between each minority group and the majority group are made using both the index and percentage improvement approaches; however, bonus points are awarded using only the approach for which the district earns scoring guide points in that grade span. See Appendix Subsection A5 for an explanation of the bonus point calculation using the percentage improvement method.

### Standard 9.2

## **Indicators 1 and 2 (Reading, Grades 3 & 7)**

**Source of data used in calculation**: Data are obtained from CTB McGraw-Hill, which is the contracted testing publisher for the Missouri Assessment Program. This CTB data file is used to create ClearAccess CDs for district use.

Two approaches are used to analyze improvement in reading performance: the index approach and the percentage improvement approach. The index calculates the movement of students throughout three reading levels (Unsatisfactory, Satisfactory, and Proficient). The percentage improvement approach evaluates the percentage of students scoring at the Proficient level. Data for each approach are displayed and analyzed by grade (3 and 7) using the five scoring guide methods outlined for each approach (High, Average High, Yearly Increase, Multiple-Year Over the Base Year, and Rolling Average).

## Reading Scoring Guidelines Using the Index Approach (A district is considered "Met" at each grade with 3 points.)

The index is calculated based on three reading levels (Unsatisfactory, Satisfactory, and Proficient). The percent of students scoring at each of these achievement levels is multiplied by the following values: Proficient by 3, Satisfactory by 2, and Unsatisfactory by 1. These products are summed to produce the index for grades 3 and 7. (See Appendix Section B for further explanation and an example of how the index is calculated.) The index is then analyzed using the following methods:

Method	<b>Description</b> Po	oints
High (H):	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 222 in grade 3 and 210 in grade 7.	4
Average High (AH):	Using 5 years of data, 4 points if the average index is equal to or greater than 222 in grade 3 and 210 in grade 7.	4
Yearly Increase (Y):	Using 5 years of data, 1 point for each yearly increase of 2 or more index points.	4
Multiple-Year Average Over the Base Year (A):	Using 5 years of data, 3 points if the four-year average (years 2, 3, 4, and 5) increases 6 index points or more over the base year and no more than one score in the four averaged years falls below the base year.	3
Rolling Average (R)*:	Using 5 years of data, 1 point for each increase of 2 or more index points in the rolling average.	3

**Index Floor:** The + symbol on the APR summary chart indicates that the reading index score in the final year of analysis and at least one of the two preceding years is below the established floor. In other words, for the 2003 APR any district with index scores that fall below the reading floor in both 2003 and 2002, or 2003 and 2001, receives a + symbol on the APR summary chart. No scoring guide points are awarded at a grade level if the reading index scores on the last year tested and at least one of the preceding two years falls below the following floor levels:

3<sup>rd</sup> Grade – 173

7<sup>th</sup> Grade – 162

## Reading Scoring Guidelines Using the Percentage Improvement Approach. (A district is considered "Met" at each grade with 3 points.)

If a district fails to meet a reading grade level using the index approach, the following methods of the percentage improvement approach are applied. The method yielding the highest number of points is used. A grade is considered "Met" if 3 or more points are earned.

Method	<b>Description</b>	Points
High (H):	Using 5 years of data, 4 points if in 4 of 5 years 50% or more of the students score at the proficient level on the MAP.	4
Average High (AH):	Using 5 years of data, 4 points if an average of 50% or more of the students score at the proficient level on the MAP.	4
Yearly Increase (Y):	Using 5 years of data, 1 point for each 2% or more yearly increase in the percent of students scoring at the proficient level on the MAP.	4
Multiple-Year Average Over the Base Year (A):	Using 5 years of data, 3 points for an increase of 4% or more in the percent of students scoring at the proficient level in the four-year average (years 2, 3 and 4) over the base year, and no more than 1 score in the four averaged years falls below the base year.	3
Rolling Average (R)*:	Using 5 years of data, 1 point for each 2% increase or more in the percent of students scoring at the proficient level on the MAP as measured by the rolling average.	3

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

**Percentage Improvement Floor:** The + symbol on the APR summary chart indicates that the percent of students scoring at the Proficient level in the final year of analysis and at least one of the two preceding years is below the established floor for the percentage improvement approach. In other words, for the 2003 APR any district whose percent of students scoring Proficient falls below the reading floor in both 2003 and 2002, or 2003 and 2001, receives a + symbol on the APR summary chart. No scoring guide points are awarded at a grade level if the percent of students scoring Proficient in the last year tested and at least one of the preceding two years falls below the following floor levels:

## Standard 9.3

(ACT -- A district is considered "Met" with 9 points.)

Method	Description	Points
High (H):	12 points if in 4 of the last 5 years of data 31% or more of the graduates scored at or above the national average on the ACT.	12
Average (A):	9 points if during the last 5 years of data the percentage of graduates scoring at or above the national average on the ACT averaged at least 27%.	g 9
Yearly Increase (Y):	3 points for each of the last 5 years of data the percent of graduates scoring at or above the national average on the ACT increased from the previous year by at least 1%.	12

<sup>3&</sup>lt;sup>rd</sup> Grade – 15% 7<sup>th</sup> Grade – 17%

Rolling Average (R)*:	5 points for each of the last five years the rolling average increased by at	15
	least 1%.	

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

## Standard 9.4

**Indicator 1 (Advanced Courses -- A district is considered "Met" with 9 points.)** 

Method	Description	Points
High (H):	12 points if in 4 of the last 5 years the percent of credits taken by juniors and	1 12
	seniors in approved advanced courses as reported in Core Data (screen 20) i	s
	35% or higher.	
Average High (AH):	12 points if the average percent of credits taken by juniors and seniors in	12
	approved advanced courses as reported in Core Data (screen 20) is 35% or	
	higher.	
Yearly Increase (Y):	3 points for each of the last 5 years that the percent of credits taken by	12
	juniors and seniors in approved advanced courses as reported in Core	
	Data (screen 20) increases by 2% or more from the previous year.	
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increases by 2% or	15
	more.	
Combined (C)**:	If during 4 out of the last five years a district has 50% or more of the credits	
	taken by juniors and seniors in Advanced Courses (9.4.1) and Vocational	
	Courses (9.4.2) combined, then both standards will be considered as "Met".	

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

## Standard 9.4

**Indicator 2 (Vocational Courses -- A district is considered "Met" with 9 points.)** 

Method	Description	Points
High (H):	12 points if during 4 of the last 5 years the percent of credits taken by junior and seniors in approved vocational courses, as reported in Core Data (screen 20), is 25% or higher.	
Average High (AH):	12 points if the average percent of credits taken by juniors and seniors in approved vocational courses, as reported in Core Data (screen 20), is 25% o higher.	r 12
Yearly Increase (Y):	3 points for each of the last 5 years the percent of credits taken by juniors an seniors in approved vocational courses, as reported in Core Data (screen 20) increases by 1% or more from the previous year.	
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increases by 1% or more.	15
Combined (C)**:	If during 4 out of the last five years a district has 50% or more of the credits taken by juniors and seniors in Advanced Courses (9.4.1) and Vocational Courses (9.4.2) combined, then both standards will be considered as "Met".	

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

<sup>\*\*</sup>See Appendix Subsection D3 for an explanation of the calculation used in the "combined" method.

<sup>\*\*</sup>See Appendix Subsection D3 for an explanation of the calculation used in the "combined" method.

## Standard 9.4

**Indicator 3 (College Placement -- A district is considered "Met" with 9 points.)** 

Method	Description	Points
High (H):	12 points if in 4 out of 5 years 60% or more of the graduates participate in postsecondary education at a community college, a four-year college/university, or technical school within six months of graduating.	12
Average High (AH):	12 points if an average of 60% or more of the graduates participate in postsecondary education at a community college, a four-year college/university, or technical school within six months of graduating.	12
Yearly Increase (Y):	3 points for each yearly increase of 1% or more in the percent of graduates who participate in postsecondary education at a community college, a four-year college/university, or technical school within six months of graduating	-
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increases by 1% or more.	15
Combined (C)**:	If during 4 out of the last 5 years the combined percent of students placed it college (9.4.3), in the military, or in a job related to their vocational training (9.4.4) is 85% or higher, then both standards will be considered "Met".	

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

## Standard 9.4

**Indicator 4 (Vocational Placement -- A district is considered "Met" with 9 points.)** 

Method	Description	Points
High (H):	12 points if during 4 of the last 5 years at least 70% of the graduates who completed a vocational program were successfully placed in occupations related to their vocational education program, continued their education of entered military service.	12 r
Average High (AH):	12 points if an average of 70% or more of the graduates who completed a vocational program were successfully placed in occupations related to the vocational education program, continued their education or entered militar service.	
Yearly Increase (Y):	3 points for each of the last 5 years that the percent of graduates who were successfully placed in occupations related to their training, continued their education or entered military service increased by 1% or more from the previous year.	
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increased by 1% or more.	15
Combined (C)**:	If during 4 out of the last 5 years the combined percent of students placed college (9.4.3), in the military, or in a job related to their vocational training (9.4.4) is 85% or higher, then both standards will be considered "Met".	

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

<sup>\*\*</sup>See Appendix Subsection D6 for an explanation of the calculation used in the "combined" method.

<sup>\*\*</sup>See Appendix Subsection D6 for an explanation of the calculation used in the "combined" method.

## Standard 10.1

**Indicator 1 (Dropout -- A district is considered "Met" with 9 points.)** 

Method	Description	Points
High (H):	12 points if during 4 of last 5 years the dropout rate reported in Core Data (screen 14) is 3% or below.	12
Yearly Increase (Y):	3 points for each year the dropout rate reported in Core Data (screen 14) decreases by .5% or more from the previous year during the past 5 years.	12
Average (A):	9 points if the average annual dropout rate for the past 5 years reported in Core Data (screen 14) is 4% or less <u>and</u> no more than one of the five years has an annual dropout rate above 5%.	9
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average decreases by .5% o more.	r 15

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

## Standard 10.1

**Indicator 2 (Attendance -- A district is considered "Met" with 9 points.)** 

Method	Description	Points
High (H):	12 points if in 4 of the last 5 years the district ADA is 95% or higher and no level (K-8 or 9-12) is below 93%.	12
Yearly Increase (Y):	3 points for each year the district ADA increases from the previous year by a least .5% and no more than one year at a level (K-8 or 9-12) is below 90% during the past 5 years.	it 12
Average (A):	9 points if the district ADA is 92% or above for each of the past 5 years and the ADA for a level (K-8 or 9-12) is below 90% for no more than one of the past 5 years.	9
Rolling Average (R)*:	5 points for each year the rolling average increases by at least .5% and no more than one year at a level (K-8 or 9-12) is below 90% during the past five years.	15

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

## **Standard 11.1** (K-8 districts only)

(Post-Elementary School GPA, -- A district is considered "Met" with 8 points.

Method	Description	Points
High (H):	10 points if the grade point average (GPA) of ninth- and tenth-grade students from the K-8 district is equal to or higher than the GPA of students from the receiving district(s) for 4 of the past 5 years.	10
Yearly 5% (Y)	8 points if the yearly GPA of the sending district is no less than 95% of the receiving district's GPA for 4 of the past 5 years.	8
Average 5% (A)	8 points if the sending district average GPA for the past 5 years combined is no less than 95% of the receiving district's 5 year average GPA.	8
Rolling Average (R)*:	5 points for each year the rolling average of the sending district's GPA increases by at least .1 with no more than one year below a 2.0.	15

MultipleYear 8 points if using 5 years of data, the four-year average (2, 3, 4, and 5) of the					
Average Over the	sending district's GPA increases by .2 over the base year.				
Base (M):					

<sup>\*</sup>See page 4 for an explanation of the procedures used to calculate the rolling average.

## **APPENDIX Section A: Standard 9.1**

#### **Subsection A.1: MAP Index Calculation**

The index is a single composite number that represents the performance of every student in all five MAP levels in a tested subject. To produce an index score, the percent of reportable students in each level in a tested subject is multiplied by the following values: Step 1 by a value of 1, Progressing by 1.5, Nearing Proficient by 2, Proficient by 2.5, and Advanced by 3. The sum of each of these products for each subject tested is the index for that subject. The index measures improvement from one year to the next for each subject. The scoring guide defines the required improvement in index score from one year to the next.

The following example shows how the index is calculated in a single subject and grade span:

> STEP 1 – The percent of students in each performance level is determined for each year.

Level	Index Point Value	<u>1999</u>	2000	<u>2001</u>	2002	2003
Step 1	1	19.5%	20.2%	17%	16.9%	9.6%
Progressing	1.5	21.3%	20.5%	21.3%	14 %	20%
Nearing Proficient	2	27%	27.6%	28%	24.6%	25.4%
Proficient	2.5	12.9%	18.4%	18.5%	22.1%	23%
Advanced	3	19.3%	13.3%	15.2%	22.4%	22%

> <u>STEP 2</u> – The percentage of students in each performance level is multiplied by the index point value for each year.

<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
$19.5 \times 1 = 19.5$	$20.2 \times 1 = 20.2$	$17 \times 1 = 17$	$16.9 \times 1 = 16.9$	$9.6 \times 1 = 9.6$
21.3 x 1.5 = 31.95	$20.5 \times 1.5 = 30.75$	21.3 x 1.5 = 31.95	$14 \times 1.5 = 21$	$20 \times 1.5 = 30$
$27 \times 2 = 54$	$27.6 \times 2 = 55.2$	$28 \times 2 = 56$	$24.6 \times 2 = 49.2$	$25.4 \times 2 = 50.8$
$12.9 \times 2.5 = 32.25$	$18.4 \times 2.5 = 46$	$18.5 \times 2.5 = 46.25$	22.1 x 2.5 = 55.25	$23 \times 2.5 = 57.5$
$19.3 \times 3 = 57.9$	$13.3 \times 3 = 39.9$	$15.2 \times 3 = 45.6$	$22.4 \times 3 = 67.2$	$22 \times 3 = 66$
195.6 Index Points	192.1 Index Points	196.8 Index Points	209.6 Index Points	213.9 Index Points

> <u>STEP 3</u> - For scoring in each grade span, a grid is created and scoring guidelines are applied to the scores in the grid. An example appears in the grid below:

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Grade 4 Math	195.6	192.1	196.8	209.6	213.9

## **Subsection A.2: Level Not Determined (LND) Calculation**

#### **Annual LND**

- 1. "Accountable Students" minus "Reportable Students" equals "LND Students"
- 2. "LND Students" divided by "Accountable Students" equals "Annual Percent of Students in LND"

#### **Average LND**

1. Sum of Annual Percent of Students in LND for all required years divided by the number of required years

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5	Average LND
Accountable	50	45	52	60	50	
Reportable	45	40	49	58	49	
LND Students	5	5	3	2	1	
Percent of Students in LND	10%	11.1%	5.8%	3.3%	2.0%	6.4%

## **Subsection A.3: Floor Calculation for Comparison of State and District Average Improvement (Index Approach)**

When a district fails to meet the requirements of the established floor in the last year of analysis, half-point values are earned if the district improves the required points using any of the five scoring guide methods **and** shows progress equal to or greater than the state average increase from year one through the final year used for analysis. The following example illustrates how the comparison is made between state and district average improvement.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
State Index Score	152.3	156.4	155.8	159.7	163.2
<b>District Index Score</b>	149.2	161.5	155.1	157.9	161.8

> <u>STEP 1</u> – Find the state yearly improvement by subtracting the index scores for years 1, 2, 3, and 4 from the subsequent year of each. (Years in which the index score decreases will be reflected by a negative number.)

Year 1 State Improvement	Year 2 Index Score minus Year 1 Index Score	156.4 – 152.3 =	4.1
Year 2 State Improvement	Year 3 Index Score minus Year 2 Index Score	155.8 – 156.4 =	6
Year 3 State Improvement	Year 4 Index Score minus Year 3 Index Score	159.7 – 155.8 =	3.9
Year 4 State Improvement	Year 5 Index Score minus Year 4 Index Score	163.2 – 159.7 =	3.5
	Sum of Yearly State Improvement		10.9

> <u>STEP 2</u> – To determine the <u>average state improvement</u>, divide the <u>sum of the yearly state improvement</u> by the number of years of data minus one

Average state improvement = 
$$\frac{10.9}{5-1}$$
 = 2.725

➤ <u>STEP 3</u> – Find the district yearly improvement by subtracting the index scores from years 1, 2, 3, and 4 from the subsequent year of each. (Years in which the index score decreases will be reflected by a negative number.)

Year 1 District Improvement	Year 2 Index Score minus Year 1 Index Score	161.5 - 149.2 =	12.3
Year 2 District Improvement	Year 3 Index Score minus Year 2 Index Score	155.1 – 161.5 =	-6.4
Year 3 District Improvement	Year 4 Index Score minus Year 3 Index Score	157.9 – 155.1 =	2.8
Year 4 District Improvement	Year 5 Index Score minus Year 4 Index Score	161.8 – 157.9 =	3.9
	Sum of Yearly District Improvement		12.6

> <u>STEP 4</u> – To determine the <u>average district improvement</u>, divide the <u>sum of the yearly district improvement</u> by the <u>number of years of data minus one</u>

Average district improvement 
$$= 12.6 = 3.15$$

➤ <u>STEP 5</u> – Compare the average state improvement to the average district improvement. If the average district improvement is equal to or greater than the average state improvement, the district is eligible to receive half-point values. In this example, the average district improvement (3.15) is higher than the average state improvement (2.725), so this district would be eligible to receive half-point values.

Footnote: Floors represent the minimal level of performance necessary to earn full scoring guide points for improvement. The floors were established at one standard deviation below the state average.

## Subsection A.4: Floor Calculation for Comparison of State and District Average Improvement (Percent Improvement Approach)

When a district fails to meet the requirements of the established floor in the last year of analysis, half-point values are earned if the district improves the required points using any of the five scoring guide methods and shows progress equal to or greater than the state average increase from year one through the final year used for analysis. The following example illustrates how the comparison is made between state and district average improvement using the percent improvement approach. This calculation is used only when methods of the percent improvement approach are applied to the standard in which the district does not meet the floor requirements in the final year.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
State Percent Scoring in	28.9%	30.3%	27.2%	30.9%	30.4%
<b>Bottom Two Levels</b>					
<b>District Percent Scoring in</b>	54.7%	47.9%	44.1%	48.6%	52.1%
<b>Bottom Two Levels</b>					

> <u>STEP 1</u> – Find the state yearly improvement by subtracting the percent scoring in the bottom two levels (Step 1 and Progressing) for years 2, 3, 4, and 5 from the previous year of each. (Years in which the percent scoring in the bottom two levels increases will be reflected by a negative number.)

Year 1 State Improvement	Year 1 % in bottom two minus Year 2 % in	28.9% - 30.3% = -1.4%
	bottom two	
Year 2 State Improvement	Year 2 % in bottom two minus Year 3 % in	31.3% - 27.2% = 4.1%
	bottom two	
Year 3 State Improvement	Year 3 % in bottom two minus Year 4 % in	27.2% - 30.9% = -3.7%
	bottom two	
Year 4 State Improvement	Year 4 % in bottom two minus Year 5 % in	31.7% - 30.4% = 1.3%
_	bottom two	
	<b>Sum of Yearly State Improvement</b>	0.3%

➤ <u>STEP 2</u> – To determine the <u>average state improvement</u>, divide the <u>sum of the yearly state improvement</u> by the <u>number of years of data minus one</u>

Average state improvement = 
$$\frac{0.3\%}{5-1}$$
 = 0.075%

➤ <u>STEP 3</u> – Find the district yearly improvement by subtracting the percent scoring in the bottom two levels (Step 1 and Progressing) for years 2, 3, 4, and 5 from the previous year of each. (Years in which the percent scoring in the bottom two levels increases will be reflected by a negative number.)

Year 1 District Improvement	Year 1 % in bottom two minus Year 2 % in	54.7% - 47.9% = 6.8%
_	bottom two	
Year 2 District Improvement	Year 2 % in bottom two minus Year 3 % in	47.9% – 44.1% = 3.8%
_	bottom two	
Year 3 District Improvement	Year 3 % in bottom two minus Year 4 % in	44.1% – 48.6% = -4.5%
	bottom two	
Year 4 District Improvement	Year 4 % in bottom two minus Year 5 % in	48.6% - 52.1% = -3.5%
	bottom two	
	Sum of Yearly District Improvement	2.6%

- <u>STEP 4</u> To determine the <u>average district improvement</u>, divide the <u>sum of the yearly district improvement</u> by the <u>number of years of data minus one</u>
   Average district improvement = <u>2.6%</u> = 0.65%
- ➤ <u>STEP 5</u> Compare the average state improvement to the average district improvement. If the average district improvement is equal to or greater than the average state improvement, the district is eligible to receive half-point values. In this example, the average district improvement (0.65%) is higher than the average state improvement (0.075%), so this district would be eligible to receive half-point values.

Footnote: Floors represent the minimal level of performance necessary to earn full scoring guide points for improvement. The floors were established at one standard deviation below the state average.

## **Subsection A.5: Bonus Point Calculation (Index Approach)**

Districts that have 20 or more students in an ethnic/racial minority in at least two consecutive years in a grade tested may earn MAP bonus points if the improvement of the minority group is greater than or equal to the improvement of the majority group in more than half of the years of comparison. Following is an illustration of the bonus point calculation using the index approach. The index bonus point calculation is used only when a district earns scoring guide points in the same grade span using the index approach. Using the index bonus point calculation, districts can earn up to 4 points per grade span (1 bonus point possible for each of the 4 subject areas). In any given subject area for a grade tested, a district whose minority group shows progress equal to the majority can earn .5 points. In any given subject area for a grade tested, a district whose minority group shows progress greater than the majority can earn 1 point.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Majority Group Composite Score</b>	165.2	158.9	167.4	168	171.7
<b>Minority Group Composite Score</b>	163.6	161.4	169.9	163.8	169.3

➤ <u>STEP 1</u> – Find the majority yearly improvement by subtracting the index scores of years 1, 2, 3, and 4 from the subsequent year of each. (Index score decreases are reflected by a negative number.)

Year 1 Majority Improvement	Year 2 Index Score minus Year 1 Index Score	158.9 - 165.2 =	- 6.3
Year 2 Majority Improvement	Year 3 Index Score minus Year 2 Index Score	167.4 – 158.9 =	8.5
Year 3 Majority Improvement	Year 4 Index Score minus Year 3 Index Score	168 - 167.4 =	.6
Year 4 Majority Improvement	Year 5 Index Score minus Year 4 Index Score	171.7 - 168 =	3.7

> <u>STEP 2</u> – Find the minority yearly improvement by subtracting the index scores of years 1, 2, 3, and 4 from the subsequent year of each. (Index score decreases are reflected by a negative number.)

Year 1 Minority Improvement	Year 2 Index Score minus Year 1 Index Score	161.4 – 163.6 =	- 2.2
<b>Year 2 Minority Improvement</b>	Year 3 Index Score minus Year 2 Index Score	169.9 – 161.4 =	8.5

Year 3 Minority Improvement	Year 4 Index Score minus Year 3 Index Score	163.8 – 169.9 =	- 6.1
Year 4 Minority Improvement	Year 5 Index Score minus Year 4 Index Score	169.3 – 163.8 =	5.5

➤ STEP 3 – Compare the yearly majority improvement to the yearly minority improvement. If the minority improvement is equal to or greater than the majority group in more than half of the comparisons, the district receives bonus points. This example shows a district with five years of consecutive assessment data for a minority group of 20 or more students. Five years of assessment data result in four years of measurable improvement for the minority group. In order to receive bonus points, this district needs minority improvement results equal to or greater than the majority group in three out of the fours years of comparison. In this example, the minority group made greater improvement than the majority group in two of the comparisons, and made equal improvement in one of the comparisons (see the shaded areas below). This district receives .5 bonus points since the minority group made progress equal to the majority group. The minority progress is considered "equal" because one of the minority's three years of improvement data required to meet the bonus point standard is equal to the majority improvement.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement	- 6.3	8.5	.6	3.7
Minority Improvement	-2.2	8.5	-6.1	5.5

The following example provides further clarification of the bonus point calculation. All data are the same as above with the exception of the third year of minority improvement. In this example, the minority improvement is greater than the majority improvement in three years and equal to the majority improvement in one year. This district receives 1 bonus point because the minority group made progress greater than the majority group. The minority progress is considered "greater than" because more than half of the years of minority improvement used for comparison are greater than the majority improvement. The year in which the minority group made equal improvement in comparison to the majority group is not required to meet the bonus point standard.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement	- 6.3	8.5	.6	3.7
Minority Improvement	-2.2	8.5	.8	5.5

For districts that have multiple minority groups, step 2 is performed for each group to determine the yearly improvement. The following chart illustrates how a district with multiple minority groups is evaluated. In this example, improvement data for the second minority group is only available for years 2-4. This results in seven total improvement comparisons for the minority groups combined. The second minority group showed less improvement than the majority group in all three years, so the combination of the minority groups' improvement is equal to or greater than the majority improvement in only three of the seven comparisons. This district receives no bonus points.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement	- 6.3	8.5	.6	3.7
Minority Group #1 Improvement	-2.2	8.5	-6.1	5.5
Minority Group #2 Improvement		6.7	.3	2.4

# **Subsection A.6: Bonus Point Calculation (Percentage Improvement Approach)**

Districts that have 20 or more students in an ethnic/racial minority in at least two consecutive years in a grade tested may earn MAP bonus points if the improvement of the minority group is greater than or equal to the improvement of the majority group in more than half of the comparisons of the percent of students in the top

two and the bottom two levels. Following is an illustration of the bonus point calculation using the percentage improvement approach. The percentage improvement bonus point calculation is used only when a district earns scoring guide points in the same grade span using the percentage improvement approach. Using the percentage improvement bonus point calculation, districts can earn up to 8 points per grade span (2 bonus points possible for each of the 4 subject areas). In any given subject area for a grade tested, a district whose minority group shows progress equal to the majority can earn 1 point. In any given subject area for a grade tested, a district whose minority group shows progress greater than the majority can earn 2 points.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
Majority Group % in top 2 levels	18.4%	22.1%	19.3%	22.8%	27%
Majority Group % in bottom 2 levels	31.9%	26.4%	25.8%	23.4%	16.5%
Minority Group % in top 2 levels	9.6%	13.9%	11.1%	12%	19.3%
Minority Group % in bottom 2 levels	42.5%	37.1%	39.2%	34.3%	27%

➤ <u>STEP 1</u> – Find the majority yearly improvement in the top two levels by subtracting the percent of students in the top two levels for years 1, 2, 3, and 4 from the % of students in the top two levels for each of the subsequent years.

Year 1 Majority Improvement	Year 2 % in top 2 minus Year 1 % in top 2	21.7% - 18.4% = 3.3%
in top 2 levels		
Year 2 Majority Improvement	Year 3 % in top 2 minus Year 2 % in top 2	19.3% - 22.1% = -2.8%
in top 2 levels		
Year 3 Majority Improvement	Year 4 % in top 2 minus Year 3 % in top 2	22.8% - 19.3% = 3.5%
in top 2 levels		
Year 4 Majority Improvement	Year 5 % in top 2 minus Year 4 % in top 2	27% - 22.8% = 4.2%
in top 2 levels		

> <u>STEP 2</u> - Find the majority yearly improvement in the bottom two levels by subtracting the percent of students in the bottom two levels for years 2, 3, 4, and 5 from the % of students in the bottom two levels for each of the previous years.

Year 1 Majority Improvement	Year 1 % in bottom 2 minus Year 2 % in	31.9% - 26.4% = 5.5%
in bottom 2 levels	bottom 2	
Year 2 Majority Improvement	Year 2 % in bottom 2 minus Year 3 % in	26.4% - 25.8% = 0.6%
in bottom 2 levels	bottom 2	
Year 3 Majority Improvement Year 3 % in bottom 2 minus Year 4 % in		25.8% - 23.4% = 2.4%
in bottom 2 levels	bottom 2	
Year 4 Majority Improvement	Year 4 % in bottom 2 minus Year 5 % in	23.4% - 16.5% = 6.9%
in bottom 2 levels	bottom 2	

> <u>STEP 3</u> – Find the minority yearly improvement in the top two levels by subtracting the percent of students in the top two levels for years 1, 2, 3, and 4 from the % of students in the top two levels for each of the subsequent years.

Year 1 Minority Improvement	Year 2 % in top 2 minus Year 1 % in top 2	13.9% - 9.6% = 4.3%
in top 2 levels		
Year 2 Minority Improvement	Year 3 % in top 2 minus Year 2 % in top 2	11.1% - 13.9% = -2.8%
in top 2 levels		
Year 3 Minority Improvement	Year 4 % in top 2 minus Year 3 % in top 2	12% - 11.1% = 0.9%
in top 2 levels		
Year 4 Minority Improvement	Year 5 % in top 2 minus Year 4 % in top 2	19.3% - 12% = 7.3%
in top 2 levels		

> STEP 4 - Find the minority yearly improvement in the bottom two levels by subtracting the percent of students in the bottom two levels for years 2, 3, 4, and 5 from the % of students in the bottom two levels for each of the previous years.

Year 1 Minority Improvement	Year 1 % in bottom 2 minus Year 2 % in	42.5% - 37.1% = 5.4%
in bottom 2 levels	bottom 2	
Year 2 Minority Improvement	Year 2 % in bottom 2 minus Year 3 % in	36.8% - 39.2% = -2.4%
in bottom 2 levels	bottom 2	
Year 3 Minority Improvement	Year 3 % in bottom 2 minus Year 4 % in	39.2% – 34.3% = 4.9%
in bottom 2 levels	bottom 2	
Year 4 Minority Improvement	Year 4 % in bottom 2 minus Year 5 % in	34.3% - 27% = 7.3%
in bottom 2 levels	bottom 2	

➤ <u>STEP 5</u> – Compare the yearly majority improvement to the yearly minority improvement. If the minority improvement is equal to or greater than the majority group in more than half of the comparisons, the district receives bonus points. This example shows a district with five years of consecutive assessment data for a minority group of 20 or more students. Five years of assessment data result in four years of measurable improvement for the minority group. In order to receive bonus points, this district needs minority improvement results equal to or greater than the majority group in five out of the eight comparisons. In this example, the minority group made greater improvement than the majority group in four of the comparisons, and made equal improvement in one of the comparisons (see the shaded areas below). This district receives 1 bonus point since the minority group made progress equal to the majority group. The minority progress is considered "equal" because one of the minority's five comparisons required to meet the bonus point standard is equal to the majority improvement.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in top 2 levels	3.3%	-2.8%	3.5%	4.2%
Minority Improvement in top 2 levels	4.3%	-2.8%	0.9%	7.3%

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in bottom 2 levels	5.5%	0.6%	2.4%	6.9%
Minority Improvement in bottom 2 levels	5.4%	-2.4%	4.9%	7.3%

The following example provides further clarification of the bonus point calculation. All data are the same as above with the exception of the third year of minority improvement in the top two levels. In this example, the minority improvement is greater than the majority improvement in five of the eight comparisons and equal to the majority improvement in one comparison. This district receives 2 bonus points because the minority group made progress greater than the majority group. The minority progress is considered "greater than" because more than half of the comparisons of minority improvement are greater than the majority improvement. The comparison in which the minority group's improvement is equal to the majority group was not required to meet the bonus point standard.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in top 2 levels	3.3%	-2.8%	3.5%	4.2%
Minority Improvement in top 2 levels	4.3%	-2.8%	3.9%	7.3%

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in bottom 2 levels	5.5%	0.6%	2.4%	6.9%
Minority Improvement in bottom 2 levels	5.4%	-2.4%	4.9%	7.3%

For districts that have multiple minority groups, steps 3 and 4 are performed for each group to determine the yearly improvement. The following chart illustrates how a district with multiple minority groups is evaluated. In this example, improvement data for the second minority group is only available for years 2-4. This results in 14 total improvement comparisons for the minority groups combined. The second minority group showed less improvement than the majority group in five of the six comparisons, so the combination of the minority groups' improvement is equal to or greater than the majority improvement in only seven of the 14 comparisons. This district receives no bonus points.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in top 2 levels	3.3%	-2.8%	3.5%	4.2%
Minority Group #1 Improvement in top 2 levels	4.3%	-2.8%	3.9%	7.3%
Minority Group #2 Improvement in top 2 levels		-2.4%	2.8%	1.6%

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in bottom 2 levels	5.5%	0.6%	2.4%	6.9%
Minority Group #1 Improvement in bottom 2 levels	5.4%	-2.4%	4.9%	7.3%
Minority Group #2 Improvement in bottom 2 levels		-4.9%	2.2%	3.8%

### Section B: Standard 9.2

## **Reading Index Calculation**

The index is a single composite number that represents the performance of every student in all three reading levels of the MAP (Unsatisfactory, Satisfactory, and Proficient). The percent of students scoring at each of these achievement levels is multiplied by the following values: Proficient by 3, Satisfactory by 2, and Unsatisfactory by 1. The sum of these products is the index, which measures improvement from one year to the next. The scoring guide defines the required index point improvement from one year to the next.

The following example shows how the index is calculated for a single grade.

> STEP 1 – The percent of students in each performance level is determined for each year.

Level	<b>Index Point Value</b>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Unsatisfactory	1	39.3%	35.1%	38.9%	23.3%	21%
Satisfactory	2	32.7%	35.6%	32.3%	36.2%	37.6%
Proficient	3	28%	29.3%	28.8%	40.5%	41.4%

➤ <u>STEP 2</u> – The percentage of students in each performance level is multiplied by the index point value for each year.

<u>1999</u>	<u>2000</u>	<u>2001</u>	2002	<u>2003</u>
$39.3 \times 1 = 39.3$	$35.1 \times 1 = 35.1$	$38.9 \times 1 = 38.9$	$23.3 \times 1 = 23.3$	$21 \times 1 = 21$
$32.7 \times 2 = 65.4$	$35.6 \times 2 = 71.2$	$32.3 \times 2 = 64.6$	$36.2 \times 2 = 72.4$	$37.6 \times 2 = 75.2$
$28 \times 3 = 84$	$29.3 \times 3 = 87.9$	$28.8 \times 3 = 86.4$	$40.5 \times 3 = 121.5$	$42 \times 3 = 126$
188.7 Index Points	194.2 Index Points	189.9 Index Points	217.2 Index Points	222.2 Index Points

> <u>STEP 3</u> - For each grade, a grid is created and scoring guidelines applied to the index scores in the grid. An example appears below:

9.2 Reading Performance Index	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Grade 3 Reading	188.7	194.2	189.9	217.2	222.2

## Section C: Standard 9.3

### **ACT Calculation**

#### Sources of data used in calculation:

- June Cycle of Core Data, Screen 14
- ACT file

#### **NOTES:**

- Only scale score data as reported by ACT will be used in these calculations.
- When students take the ACT multiple times, the highest test score is used to determine the number of graduates scoring at or above the national average.

	9.3 ACT	1999	2000	2001	2002	2003
From Screen 14	Number of Graduates	148	153	155	170	152
From ACT file	Number of Graduates Scoring at or Above the National Average	27	39	43	39	38
	Percent of Graduates Scoring at or Above the National Average	18.2	25.5	27.7	22.9	25

#### Method for calculating supporting data:

The percent of graduates scoring at or above the national average is determined by dividing the <u>number of graduates scoring at or above the national average</u> by the <u>number of graduates</u>, then multiplying by 100.

EXPLANATION OF DATA	EXAMPLES OF DATA	EXAMPLES OF
	(using 1999 figures)	CALCULATIONS
1) The <b>number of graduates</b> is reported on	number of graduates = 148	
Screen 14.		
2) The number of graduates scoring at or	number of graduates	
above the national average is provided by	scoring at or above the	
ACT.	national average = 27	
3) The percent of graduates scoring at or	a) number of graduates =	% of graduates scoring at or
above the national average is determined by	148	above the national average =
dividing the <b>number of graduates scoring at</b>	b) number of graduates	<u>27</u> = .182
or above the national average by the	scoring at or above the	148
<b>number of graduates</b> , then multiplying by	national average = 27	
100.		.182 X 100 = 18.2%

### Section D: Standard 9.4

## **Subsection D.1: Advanced Courses Calculation (9.4.1)**

#### Sources of data used in calculation:

- October Cycle of Core Data, Screens 16, 20, and 22
- August Cycle of Core Data, Screen 10

**NOTE:** In addition to the advanced courses provided within the resident district, advanced courses provided off site are automatically included in the calculation for 9.4.1 if the district submits the required data (including course numbers) on Core Data Screen 22. A separate list must be submitted for each area institution that provides advanced courses (i.e., community colleges, four-year colleges and universities, and Internet/electronic instructional providers). Only those specific courses with numbers matching those on the approved advanced course list and dual credit courses (excluding vocational dual-credit classes) count in the advanced course calculation.

	Example of supporting data format for	APR:				
	9.4*1 Advanced Courses	1999	2000	2001	2002	2003
From Screens 20 and 22	Units of Credit Times Enrollment in Approved Advanced Courses	137	155	160	162	148
From Screens 16 and 10	Grades 11-12 Enrollment Times Credits Possible	372	401	393	405	378
	Percent of Credits Earned in Advanced Courses	36.8	38.7	40.7	40	39.2

#### Method for calculating supporting data:

The percent of credits earned in advanced courses is determined by dividing the units of credit times enrollment in approved advanced courses by grades 11-12 enrollment times credit possible, then multiplying by 100. The following explains the step-by-step process and provides an example of how the calculations are performed.

EXPLANATION OF CALCULATIONS	EXAM	PLES OF	DATA	EXAMPLES OF
	(using	1999 figu	res from	CALCULATIONS
		above)		
1) Units of credit times enrollment in	ADVANC	EED		
approved advanced courses is determined	Course #	Credit	Enrol1	Adv. Course Units Earned
by using the courses reported on Screen 20	054810	1	18	1 X 18 = 18
that match the advanced course criteria (i.e.	056500	1	16	1 X 16 = 16
course number, sequence, and grade level	062000	.5	20	$.5 \times 20 = 10$
see below for a list of advanced courses) and	066300	1	17	1 X 17 = 17
non-vocational dual-credit courses reported	115860	1	19	1 X 19 = 19
on Screen 22. The credit value of each course	991105	2	21	$+2 \times 21 = 42$
is multiplied by the course enrollment, then				122
these products are summed.				

	DUAL CREDIT (excluding	5 10 10 10
	vocational)	<u>Dual Credit Units Earned</u>
	Course # Credit Enroll	1 X 15 = 15
	115861 1 15	
		122 + 15 = 137 Total Units
		Earned
2) Grades 11-12 enrollment times credits	September enrollment for	
<b>possible</b> is determined by using the sum of	grades 11 and $12 = 62$	
the enrollment in grades 11 and 12 (using		
September count), which is reported on	Periods per day = 6	62 X 6 = 372
Screen 16. This total enrollment number is		
multiplied by the total number of periods per		
day, as reported on Screen 10. If the reported		
periods per day are less than 6, this indicates		
block scheduling. In this case, the enrollment		
is multiplied by total periods per day times 2.		
3) The percent of credits earned in	a) units of credit times	% of credits earned in
advanced courses is determined by dividing	enrollment in advanced	advanced courses =
units of credit times enrollment in	courses = 137	<u>137</u> = .368
advanced courses by grades 11-12	b) grades 11-12 enrollment	372
enrollment times credits possible, then	times credits possible = 372	
multiplying by 100.		$.368 \times 100 = 36.8\%$

#### **List of Advanced Courses**

The following courses/course codes have been designated "Advanced Courses." These courses are considered advanced because they are over and above the courses required for graduation. It is assumed that the content of the courses, in general, is at a level suitable for juniors and seniors who are preparing for postsecondary education or training.

Course Code	Course Name	<u>Description</u>
054800	Language Arts	Grade 11 or 12 and sequence 3 or greater
054804-5	Comp/Creative Writing	Grade 11 or 12
054806	Applied Comm.	Grade 11 or 12 and sequence 3 or greater
054810	Journalism	Grade 11 or 12 and sequence 2 or greater
054817	Folklore	Grade 11 or 12
054819-28	Literature, Various	Grade 11 or 12
054845	Shakespeare	Grade 11 or 12
054850	Mythology	Grade 11 or 12
054860	Word Study (Semantics)	Grade 11 or 12
054861	C. Prep English	Grade 11 or 12
054863	Satire-Humor	Grade 11 or 12
054864	Ethnic Literature	Grade 11 or 12
056500	Speech	Grade 11 or 12 and sequence 2 or greater
056510	Debate	Grade 11 or 12
062000	American Sign Language	Grade 11 or 12
064900	French	sequence 2 or greater

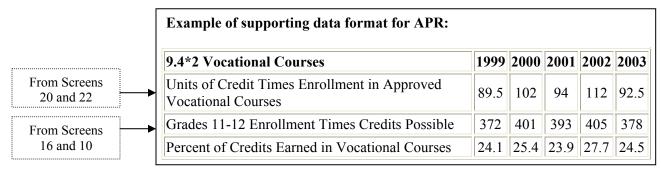
065100	German	sequence 2 or greater
065700	Latin	sequence 2 or greater
066200	Russian	sequence 2 or greater
066300	Spanish	sequence 2 or greater
067100	Hebrew	sequence 2 or greater
068000	Japanese	sequence 2 or greater
069010	Chinese	sequence 2 or greater
069020	Italian	sequence 2 or greater
115800	Mathematics (Integrated)	Grade 11 or 12 and sequence 3 or greater
115810	Algebra	sequence 2 or greater
115825	Applied Math	Grade 11 or 12 and sequence 3 or greater
115830	Geometry	Grade 11 of 12 and sequence 5 of greater
115840	Math Analysis	Grade 11 or 12
115860	Trigonometry	Grade 11 or 12
115861	Alg-Trigonometry	Grade 11 or 12
115865	Analytical Geometry	Grade 11 or 12
115866	Calculus	Grade 11 or 12
115875	Prob-Statistics	Grade 11 or 12
133810	Astronomy	Grade 11 or 12
133810	Geology	Grade 11 or 12
134200	Biology	Grade 11 or 12 and sequence 2 or greater
134210	Botany	Grade 11 or 12
134210	Zoology	Grade 11 or 12
134221	Phys-Anatomy	Grade 11 or 12
134600	Chemistry	Grade 11 or 12
134642	Applied Science	Grade 11 or 12 and sequence 3 or greater
135000	Science (Integrated)	Grade 11 or 12 and sequence 3 or greater
135900	Physics	Grade 11 or 12
135910	Prin-Technology	Grade 11 or 12
156100	Psychology	Grade 11 or 12
156620	Contemporary Issues	Grade 11 or 12
156630	Economics	Grade 11 or 12
156640	Geography	Grade 11 or 12 and sequence 2 or greater
156651	American Government	Grade 11 or 12 and sequence 2 or greater
156652	International Relations	Grade 11 or 12
156653	Comparative Government	Grade 11 or 12
156661	American History	Grade 11 or 12 and sequence 2 or greater
156663	World History	Grade 11 or 12 and sequence 2 or greater
156664-67	History, Various	Grade 11 or 12
156670	Sociology	Grade 11 or 12
156680	Anthropology	Grade 11 or 12
156683	Afro-American History	Grade 11 or 12  Grade 11 or 12
156685	Minority Groups	Grade 11 or 12 Grade 11 or 12
156691	Civil War Period	Grade 11 or 12 Grade 11 or 12
156692	American Heritage	Grade 11 of 12  Grade 11 or 12
156693	History of West	Grade 11 of 12 Grade 11 or 12
991105	Computer Science	Grade 11 of 12 Grade 11 or 12
771103	Computer Science	Utauc 11 01 12

## **Subsection D.2: Vocational Courses Calculation (9.4.2)**

#### Sources of data used in calculation:

- October Cycle of Core Data, Screens 16, 20, and 22
- August Cycle of Core Data, Screen 10

**NOTE:** Dual-credit vocational classes are included in this standard.



#### Method for calculating supporting data:

The percent of credits earned in vocational courses is determined by dividing the units of credit times enrollment in approved vocational courses by grades 11-12 enrollment times credit possible, then multiplying by 100. The following explains the step-by-step process and provides an example of how the calculations are performed.

EXPLANATION OF CALCULATIONS	EXA	MPLES (	OF DATA	EXAMPLES OF
	(using 1999 figures from above)		s from above)	CALCULATIONS
1) The units of credit times enrollment in	VOCATION	ONAL (d	on-site)	
approved vocational courses is determined	Course #	Credit	<b>Enroll</b>	Voc. Units Earned On-site
by using data reported on Screen 20 to	034354	1.5	17	$1.5 \times 17 = 25.5$
identify state-approved vocational courses,	034380	1	13	1 X 13 = 13
indicated by a program code "01" (see next	040080	2	18	$+2 \times 18 = 36$
page for exceptions). Data from Screen 22				74.5
are used to identify vocational courses				
offered off-site (i.e., at an area vocational	VOCATION	ONAL (d	off-site)	
school or college). The credit value of each	Course #	Credit	<u>Enroll</u>	Voc. Units Earned Off-site
course is multiplied by the course	016720	1	15	1 X 15 = 15
enrollment, then the products are summed.				
				74.5 + 15 = 89.5 Total Units
				Earned
2) Grades 11-12 enrollment times credits	September	enrollm	ent for grades	
<b>possible</b> is determined by using the sum of	11 and 12	= 62		
the enrollment in grades 11 and 12 (using				
September count), which is reported on	Periods pe	r day = 6	1	62 X 6 = 372
Screen 16. This total is multiplied by the				
total number of periods per day, as reported				
on Screen 10. If the reported periods per				
day are less than 6, this indicates block				
scheduling. In this case, the enrollment is				
multiplied by total periods per day times 2.				

3) To determine percent of credits earned	a) units of credit times enrollment	% of credits earned in
in vocational courses, the units of credit	in vocational courses = 89.5	vocational courses =
times enrollment in vocational courses are	b) grades 11-12 enrollment times	89.5 = .241
divided by grades 11-12 enrollment times	credits possible = 372	372
<b>credits possible</b> , then multiplied by 100.	•	
		.241 X 100 = 24.1%

## **Vocational Courses Exceptions**

All state-approved vocational courses are used in the evaluation of MSIP Performance Standard 9.4.2 **except** for the following:

Course Code	Course Name
016700	Exploring Agriculture
016710	Agricultural Science 1
016760	Agricultural Science 2
096800	Exploratory Family and Consumer Sciences

Note: Please contact the Division of Vocational and Adult Education (573/751-2660) if you have questions regarding the approval of a vocational program.

## **Subsection D.3: Advanced and Vocational Courses Calculation** (9.4.1 and 9.4.2)

Note: This calculation is used to determine if a district meets 9.4.1 and 9.4.2 using the "combined" method.

#### Sources of data used in calculation:

- October Cycle of Core Data, Screens 16, 20, and 22
- August Cycle of Core Data, Screen 10

	Example of supporting data format for AP	R:				
	9.4*1 Advanced Courses	1999	2000	2001	2002	2003
From Screens 20 and 22	Units of Credit Times Enrollment in Approved Advanced and Vocational Courses	226.5	247	258	266	237.5
From Screens 16 and 10	Grades 11-12 Enrollment Times Credits Possible	372	401	393	405	378
	Percent of Credits Earned in Advanced and Vocational Courses	60.9	61.6	65.6	65.7	62.8

#### Method for calculating supporting data:

The percent of credits earned in advanced and vocational courses combined is determined by dividing the units of credit times enrollment in approved advanced and vocational courses by grades 11-12 enrollment times credit possible, then multiplying by 100. The following explains the step-by-step process and provides an example of how the calculations are performed.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA	EXAMPLES OF
	(using 1999 figures from	CALCULATIONS
	above)	
1) Units of credit times enrollment in approved	a) Units of credit times	137 + 89.5 = 226.5
advanced and vocational courses is calculated by	enrollment in approved	
adding the units of credit times enrollment in approved	advanced courses $= 137$	
advanced courses to the units of credit times enrollment	b) Units of credit times	
in approved vocational courses. (For further	enrollment in approved	
explanation, see Subsections D1 and D2.)	vocational courses = 89.5	
2) Grades 11-12 enrollment times credits possible is	September enrollment for	62 X 6 = 372
determined by using the sum of the enrollment in	grades 11 and $12 = 62$	
grades 11 and 12 (using September count), which is		
reported on Screen 16. This total enrollment number is	Periods per day $= 6$	
multiplied by the total number of periods per day, as		
reported on Screen 10. If the reported periods per day		
are less than 6, this indicates block scheduling. In this		
case, the enrollment is multiplied by total periods per		
day times 2.		
3) The percent of credits earned in advanced and	a) units of credit times	% of credits earned in
vocational courses is determined by dividing units of	enrollment in advanced	advanced courses =
credit times enrollment in approved advanced and	courses = 226.5	226.5 = .609
vocational courses by grades 11-12 enrollment times	b) grades 11-12	372
<b>credits possible</b> , then multiplying by 100.	enrollment times credits	
	possible = 372	.609 X 100 = 60.9%

## **Subsection D.4: College Placement Calculation (9.4.3)**

#### Sources of data used in calculation:

- February Cycle of Core Data, Screen 8
- June Cycle of Core Data, Screen 14

	Example of supporting data format for APR:						
	9.4*3 College Placement	1998	1999	2000	2001	2002	
From Screen 8	Number of Graduates Entering College	69	72	79	83	93	
From Screen 14	Number of Graduates	126	133	128	141	143	
(previous year)	Percent of Graduates Entering College	54.8	54.1	61.7	58.9	65	

#### Method for calculating supporting data:

The percent of graduates entering college is determined by dividing the <u>number of graduates entering college</u> by the <u>number of graduates</u>, then multiplying by 100.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA		EXAMPLES OF
	(using 1998 figures from		CALCULATIONS
	above)		
1) The number of graduates entering		Totals	43+16+10 = 69
<b>college</b> is determined by using the sum of the previous year's graduates who entered 4-year	4-year college	43	
college, 2-year college, or non-college credit	2-year college	16	
postsecondary school (i.e., technical school), as reported on Screen 8.	non-college	10	
2) The <b>number of graduates</b> is reported on	graduates = 126		
Screen 14 from the previous year of Core			
Data.			
3) The percent of graduates entering	a) number of gradu	ates	% of graduates entering
<b>college</b> is determined by dividing the	entering college $= 6$	69	college = <u>69</u> = .548
number of graduates entering college by	b) number of graduates =		126
the number of graduates, then multiplying	126		
by 100.			.548 X 100 = 54.8%

## **Subsection D.5: Vocational Placement Calculation (9.4.4)**

#### Sources of data used in calculation:

• February Cycle of Core Data, Screens 26 and 27

	Example of supporting data format for APR:					
	9.4*4 Vocational Placement	1998	1999	2000	2001	2002
From Screens	Number of Graduates Completing a Vocational Education Program	41	36	38	42	44
From Screens 26 and 27	Number of Graduates Completing a Vocational Education Program Placed in Occupations Relating to their Training, Attending College, or in the Military	33	24	27	32	33
	Percent of Vocational Completers who are Placed	80.5	66.7	71.1	76.2	75

#### Method for calculating supporting data:

The percent of vocational completers who are placed is determined by dividing the <u>number of graduates</u> completing a vocational education program placed in occupations relating to their training, attending college, or <u>in the military</u> by the <u>number of graduates completing a vocational education program</u>, then multiplying by 100.

EXPLANATION OF CALCULATIONS  1) The number of graduates completing a vocational education program is determined by adding the number of graduates reported on Screens 26 (for students reported by the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  EXAMPLES OF CALCULATIONS  SCREEN 26  Emp Rel = 5 Emp N-R = 3 Ced Rel = 0 Ced N-R = 6 Not Emp = 0 Nav Plc = 1 Sts Unk = 1 Mil Rel = 2 Mil N-R = 4  SCREEN 27  Emp Rel = 7 Emp N-R = 2 Ced Rel = 2 Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1  TOTAL = 22+19=41  TOTAL = 22+19=41
1) The number of graduates completing a vocational education program is determined by adding the number of graduates reported on Screens 26 (for students reported by the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  SCREEN 26  Emp Rel = 5 Emp N-R = 3 Ced Rel = 0 Ced N-R = 3 Not Emp = 0 Nav Plc = 1 Sts Unk = 1 Mil Rel = 2 Mil N-R = 4  SCREEN 27  Emp Rel = 7 Emp N-R = 2 Ced Rel = 2 Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1  TOTAL = 22+19=41
completing a vocational education program is determined by adding the number of graduates reported on Screens 26 (for students reported by the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  Emp Rel = 5 Emp N-R = 3 Ced Rel = 0 Ced N-R = 3 Not Emp = 0 Nav Plc = 1 Sts Unk = 1 Mil Rel = 2 Mil N-R = 4  SCREEN 27  Emp Rel = 7 Emp N-R = 2 Ced Rel = 2 Ced Rel = 2 Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1  TOTAL = 22+19=41
program is determined by adding the number of graduates reported on Screens 26 (for students reported by the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,    Ced N-R = 6   Not Emp = 0   Nav Plc = 1     Sts Unk = 1   Mil Rel = 2   Mil N-R = 4     SCREEN 27     Emp Rel = 7   Emp N-R = 2   Ced Rel = 2     Ced N-R = 3   Not Emp = 1   Nav Plc = 0     Sts Unk = 0   Mil Rel = 3   Mil N-R = 1     TOTAL = 22+19=41     TOTAL = 22+19=41
program is determined by adding the number of graduates reported on Screens 26 (for students reported by the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  Ced N-R = 6 Not Emp = 0 Nav Plc = 1 Sts Unk = 1 Mil Rel = 2 Mil N-R = 4  SCREEN 27  Emp Rel = 7 Emp N-R = 2 Ced Rel = 2 Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1  TOTAL = 22+19=41
the number of graduates reported on Screens 26 (for students reported by the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  Sts Unk = 1 Mil Rel = 2 Mil N-R = 4  SCREEN 27  Emp Rel = 7 Emp N-R = 2 Ced Rel = 2 Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1  TOTAL = 22+19=41
the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  SERBIV 27  Emp Rel = 7 Emp N-R = 2 Ced Rel = 2 Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1  TOTAL = 22+19=41
27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,
27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1  TOTAL = 22+19=41
AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,  Sts Unk = 0 Mil Rel = 3 Mil N-R = 1 TOTAL = 22+19=41
CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL,
NAV PLC, STS UNK, MIL REL,
and MIL N-R.
2) The number of graduates SCREEN 26 =
completing a vocational education   Emp Rel = 5   Ced Rel = 0   Ced N-R = 6   $5+0+6+2+4=17$
program placed in occupations   Mil Rel = 2 Mil N-R = 4
relating to their training, attending
college, or in the military is
determined by adding the number of SCREEN 27 = SCREEN 27 =
graduates reported on Screens 26 and $\begin{bmatrix} \text{Emp Rel} = 7 & \text{Ced Rel} = 2 & \text{Ced N-R} = 3 \end{bmatrix}$ 7+2+3+3+1 = 16
27 in the following categories: EMP   Mil Rel = 3 Mil N-R = 1
REL, CED REL, CED N-R, MIL TOTAL = 17+16 = 33
REL, MIL N-R.

3) The percent of vocational	a) number of graduates completing a	percent of vocational
completers who are placed is	vocational education program = 41	completers who are
determined by dividing the <b>number</b>	b) number of graduates completing a	placed = $33 = .805$
of graduates completing a	vocational education program placed in	41
vocational education program	occupations relating to their training,	
placed in occupations relating to	attending college, or in the military =33	.805 X 100 = 80.5%
their training, attending college, or		
in the military by the number of		
graduates completing a vocational		
education program, then		
multiplying by 100.		

#### **Vocational Placement/Follow-Up Guidelines**

Follow-up data is reported on the previous year's graduates based on the status of the graduates 180 days following their exit from vocational training. *Each graduate should be reported in only one vocational education program area.* Districts should collect follow-up information on any student who graduated high school and received credit in at least one state-approved vocational education course (excluding Exploring Agriculture, Industrial Technology, and any FACS course) during grades 9-12. However, if students completed state-approved vocational courses at the comprehensive high school and the area vocational school, their follow-up data should <u>not</u> be reported for both locations. Generally, the area vocational school is responsible for completing the follow-up data on screen 27 and providing the sending school with a copy.

If the graduate is employed and continuing education, use the following guidelines:

- A graduate attending school (full- or part-time) <u>and</u> employed (full or part-time) in a field for which they were trained, should be reported as "employed related" (EMP REL).
- A graduate attending school (full- or part-time) in a field for which they were trained, but not employed in a field for which they were trained should be reported as "continuing education related" (CED REL).
- A graduate attending school (full- or part-time) in a field for which they were <u>not</u> trained, but employed (full or part-time) in a field for which they were trained should be reported as "employed related" (EMP REL).

## Subsection D.6: College and Vocational Placement Calculation (9.4.3 and 9.4.4 Combined)

Note: This calculation is used to determine if a district meets 9.4.3 and 9.4.4 using the "combined" method.

#### Sources of data used in calculation:

- February Cycle of Core Data, Screens 8, 26, and 27
- June Cycle of Core Data, Screen 14

	Example of supporting data format for APR:					
From Coroons 9	9.4*3 College Placement & 9.4*4 Vocational Placement	1998	1999	2000	2001	2002
From Screens 8, 26, and 27	Number of Graduates Entering College or Placed in an Occupation Related to their Vocational Training or the Military	91	88	82	97	103
From Screen 14 (previous year)	Number of Graduates	126	133	128	141	143
(previous year)	Percent College and Vocational Placement	72.2	66.2	64.1	68.8	72

#### Method for calculating supporting data:

The percent of graduates entering college or in vocational placement is determined by dividing the <u>number of graduates entering college or placed in an occupation related to their vocational training or the military</u> by the <u>number of graduates</u>, then multiplying by 100.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using 1998 figures from above)	EXAMPLES OF CALCULATIONS
1) The number of graduates entering	SCREEN 8	SCREEN 8
college or placed in an occupation related	4-year college = 43	
to their vocational training or the military	2-year college = 16	43+16+10 = 69
is determined by using the sum of the	non-college =10	
previous year's graduates reported on Screen	SCREEN 26	SCREEN 26
8 who entered 4-year college, 2-year college,	Emp Rel = $5$ Mil Rel = $2$	5+2+4 = 11
or non-college credit postsecondary school	Mil N-R = 4	
(i.e., technical school) and adding this to the	SCREEN 27	SCREEN 27
number of the previous year's graduates	Emp Rel = $7$ Mil Rel = $3$	7+3+1=11
reported in one of the following categories on	Mil N-R = 1	TOTAL
Screens 26 and 27: EMP REL, MIL REL, and MIL NR.		69+11+11 = 91
2) The <b>number of graduates</b> is reported on	graduates = 126	
Screen 14 from the previous year's Core	8	
Data.		
3) The percent of college and vocational	a) number of graduates	% of graduates entering
<b>placement</b> is determined by dividing the	entering college or placed	college = $91$ = .722
number of graduates entering college or	in an occupation related to	126
placed in an occupation related to their	their vocational training or	
vocational training or the military by the	the military = 91	$.722 \times 100 = 72.2\%$
<b>number of graduates</b> , then multiplying by	b) number of graduates =	
100.	126	

## Section E: Standard 10.1

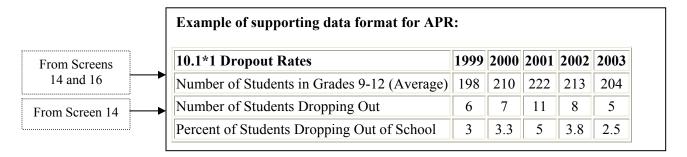
## **Subsection E.1: Dropout Calculation (10.1.1)**

#### Sources of data used in calculation:

- June Cycle of Core Data, Screen 14
- October Cycle of Core Data, Screen 16

#### **NOTES:**

- In the year of a district's MSIP review, two points are deducted from 10.1.1 if the district does not consistently report students who drop out of school to the Missouri Literacy Hotline, as required by Standard 8.3.5.
- In the year of a district's MSIP review, one bonus point is added for each of the past five years in which at least 5% of the district's five-year average number of seniors earned a GED within 5 years of dropping out of school (see explanation and example on next page).
- Zero points are given if the average of the annual dropout rates for the past 5 years is 10% or higher.



#### Method for calculating supporting data:

The percent of students dropping out of school is determined by dividing the <u>number of students dropping out</u> by the number of students in grades 9-12 (average), then multiplying by 100.

EXPLANATION OF	EXAMPLES OF DATA	EXAMPLES OF
CALCULATIONS	(using 1999 figures from above)	CALCULATIONS
1) The number of students in grades	Sept. enrollment for grades $9-12 = 200$	200  X  2 = 400
<b>9-12 (average)</b> is determined by using		
the September enrollment reported on	Transfers in = 9	400 + 9 - (7 + 6) = 198
Screen 16 for grades 9-12 and		2
multiplying by 2. Next, using data	Transfers out = $7$	
from Screen 14, the reported transfers		
in are added, and the reported transfers	Dropouts = 6	
out and dropouts are subtracted.		
Finally, this total is divided by 2.		
2) The number of students dropping	Dropouts = 6	
out of school is reported on Screen 14.	Diopoulo 0	

3) The percent of students dropping out of school is determined by dividing the number of students dropping out of school by the number of students in grades 9-12	a) number of students dropping out of school = 6 b) number of students in grades 9-12 (average) = 198	percent of students dropping out of school = $\frac{6}{198}$ = .03
number of students in grades 9-12 (average), then multiplying by 100.		.03 X 100 = 3%

#### **Bonus Points Calculation**

In the year of a district's MSIP review, one bonus point is added for each of the past five years in which at least 5% of the district's five-year average number of seniors earned a GED within 5 years of dropping out of school. The following step-by-step example illustrates how the bonus points are calculated.

Example:

# of seniors (as reported in the September count on	1999	2000	2001	2002	2003
Core Data screen 16)	38	45	42	46	39
# of GED completers (only those who complete the	0	1	3	2	1
GED within five years of their drop-out date are					
counted in the bonus points calculation)					

> STEP 1 – Average the number of seniors from the past five years.

$$\frac{38+45+42+46+39}{5} = 42$$

> <u>STEP 2</u> – Multiply the five-year average by .05 (rounding to the nearest whole number). This product is 5% of the average number of seniors.

$$.05 \times 42 = 2$$

> <u>STEP 3</u> – Compare the product of the calculation in step 2 to the annual number of drop-outs who completed a GED within five years of their drop-out date. The district earns a point for each year in which the number of GED completers equals or exceeds 5% of the average number of seniors.

In this example, 5% of the average number of seniors is two. The district earns a total of two points – one point for 2001 and one point for 2002 – because the number of GED completers equals or exceeds two in these years.

## **Subsection E.2: Attendance Calculation (10.1.2)**

#### Sources of data used in calculation:

- June Cycle of Core Data, Screens 10 and 14
- February Cycle of Core Data, Screen 16

#### **Example of supporting data format for APR:**

10.1*2 Average Daily Attendance	1999	2000	2001	2002	2003
Grades K-8	94.3	94.2	94.3	94.4	94.6
Grades 9-12	90.8	91.8	90.5	91.1	92.4
Grades K-12	93.1	93.5	93.1	93.4	93.9

#### Method for calculating supporting data:

If five years of hours-of-absence data are available for all grade levels, the average daily attendance for each grade span is determined by using the "hours of absence" method. This method is calculated by dividing the hours of attendance by the hours possible, then multiplying by 100.

If five years of hours-of-absence data are not available at all grade levels, the "January membership" method is used. This method is calculated by dividing the <u>average daily attendance</u> by the <u>reported January</u> membership count, then multiplying by 100.

HOURS OF ABSENCE METHOD							
EXPLANATION OF	EXAMPLES OF DATA	EXAMPLES OF					
CALCULATIONS	(using 1999 figures from above)	CALCULATIONS					
1) The hours of attendance is	ATTENDANCE HOURS	163,298 + 40,113 + 0 + 0 = 203,411					
determined by adding the Full-	Full-time: 163,298						
time, Part-time, Deseg In, and	Part-time: 40,113						
Fed Lands attendance hours	Deseg in: 0						
reported on Screen 14.	Fed lands: 0						
2) The <b>hours possible</b> is	Resident I hours of absence = 15061	a) hours of absence =					
determined by adding attendance	Deseg In hours of absence = 0	15,061+0+0 = 15,061					
hours and hours of absence.	Fed Lands hours of absence = 0	b) attendance hours = 203,411					
Hours of absence are reported on		c) hours possible =					
Screen 14 and include the totals		15,061+203,411 = 218,472					
for Resident I, Deseg In, and Fed							
Lands.							
3) The attendance rate using	a) hours of attendance = 203,411	Average daily attendance using					
the "hours of absence" method	b) hours possible = 218,472	the hours of absence method =					
is determined by dividing the		<u>203,411</u> = .931					
hours of attendance by the		218,472					
hours possible, then multiplying							
by 100.		.931 X 100 = 93.1%					

## **Example of supporting data format for APR:**

10.1*2 Average Daily Attendance	1998	1999	2000	2001	2002
Grades K-8	94.3	94.2	94.3	94.4	94.6
Grades 9-12	90.8	91.8	90.5	91.1	92.4
Grades K-12	93.2	93.5	93.1	93.4	93.9

JANUARY MEMBERSHIP METHOD							
EXPLANATION OF	EXAMPLES OF DATA	EXAMPLES OF					
CALCULATIONS	(using 1998 figures from above)	CALCULATIONS					
1) The average daily	ATTENDANCE HOURS						
attendance is determined by	Full-time: 163,298	163,298 + 40,113 + 0 + 0 = 203,411					
adding the Full-time, Part-time,	Part-time: 40,113						
Deseg In, and Fed Lands	Deseg in: 0	203,411 = 187.54					
attendance hours reported on	Fed lands: 0	1084.65					
Screen 14 and dividing this sum							
by the hours in session reported	Hours in session: 1084.65						
on Screen 10.							
2) The <b>January membership</b> is	Full-time: 161	January membership =					
determined by adding the	Part-time: 40.2	161+40.2+0+0=201.2					
number of students reported as	Deseg in: 0						
Full-time, Part-time, Deseg In, or	Fed land: 0						
Fed Lands for the January							
membership on Screen 16.							
3) The average daily	a) average daily attendance = 187.54	average daily attendance using					
attendance using the January	b) January membership = 201.2	the January membership method					
membership method is		= <u>187.54</u> $=$ .932					
determined by dividing the		201.2					
average daily attendance by the							
January membership, then		.932 X 100 = 93.2%					
multiplying by 100.							

## **Section F: Standard 11.1**

## **Post-Elementary School GPA Calculation (K-8 Districts Only)**

Source of data used in calculation:

June Cycle of Core Data, Screen 14B

	Example of supporting data	Example of supporting data format for APR:					
	11.1 Grade Point Average	1999	2000	2001	2002	2003	
From Screen 14B	GPA of Grades 9 and 10 Elementary Students	2.405	2.557	2.613	2.79	2.734	
	GPA of Grades 9 and 10 Receiving High School Students	2.75	2.912	2.881	2.889	2.725	

#### Method for calculating supporting data:

The <u>GPA of grades 9 and 10 elementary students</u> is determined by finding the average GPA (using a 4-point scale) of resident II (tuition) students who graduated from a K-8 district and are in either grade 9 or 10 at the receiving school.

The <u>GPA of grades 9 and 10 receiving high school students</u> is determined by finding the average GPA (using a 4-point scale) for students in grades 9 and 10 who are not resident II students.

EXPLANATION OF CALCULATIONS	EXAMPLES OF D (using 1999 figures above)	EXAMPLES OF CALCULATIONS			
The GPA of grades 9 and 10 elementary students is calculated using the GPA (rounded to the nearest thousandth) reported on Screen 14B for ninth- and tenth-grade resident II	K-8 graduates GRADE 9	tudents 5	7.34 4.513	Calculation (7.34+1) ÷3 (4.513+1)÷3	<b>4-pt</b> 2.78 1.838
students who graduated from a K-8 district. If GPAs are reported on an 11-point scale, they must be converted to a 4-point scale before performing the calculations. The formula for this conversion is (GPA + 1) ÷ 3. To determine the overall average of the K-8 graduate GPAs, first the GPA for grade 9 is multiplied by the number of students in grade 9. Next, the GPA for grade 10 is multiplied by the number of students in grade 10. These	Dist.#2 4.513  GRADE 10	tudents 2 2	6.428 (6.428+1)÷3 4.895 (4.895+1)÷3  Calculated GPA  2.78 X 5 = 13.9  1.838 X 2 = 3.676 2.476 X 2 = 4.952 1.965 X 2 = 3.93  Total = 26.458  Total # K-8 graduates		2.476
steps are repeated for all districts attended by the K-8 graduates. The products are then summed and divided by the total number of K-8 graduates in grades 9 and 10.				alculated GPA ÷ 11 = 2.405	

The GPA of grades 9 and 10 receiving	<b>Receiving District Students</b>			11-pt	Calculation	4-pt	
high school students is calculated using	GRADE 9			7.574	(7.574+1)÷3	2.858	
the GPA (rounded to the nearest	<u>District</u>	<u>GPA</u>	<b>Students</b>	6.158	(6.158+1)÷3	2.386	
thousandth) reported on Screen 14B for	Dist.#1	7.574	615	7.667	(7.667+1)÷3	2.889	
ninth- and tenth-grade receiving-district	Dist.#2	6.158	263	6.475	(6.475+1)÷3	2.492	
students (GPAs reported on an 11-point	GD 1 DD 10			Calcula	ted GPA		
scale are converted to a 4-point scale). To		<u>GRADE</u>		2.858 X 615 = 1757.67			
determine the overall average of the	District GPA Students 2.386 X 263 = 627.518						
receiving-district student GPAs, first the	Dist.#1	7.667	589	2.889 X 589 = 1701.621			
GPA for grade 9 is multiplied by the number of students in grade 9. Next, the	Dist.#2	#2 6.475 206 $\frac{2.889 \times 389 - 1701.021}{2.492 \times 206 = 513.352}$					
GPA for grade 10 is multiplied by the				Total = 4600.161			
number of students in grade 10. These				Total # Receiving Dist. Student			
steps are repeated for all receiving districts.				615+263	3+589+206=1673	3	
The products are then summed and divided				Final C	alculated GPA		
by the total number of receiving-district students in grades 9 and 10.				4600.16	$1 \div 1673 = 2.75$		
students in grades 9 and 10.							